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










# HEATING BOILER SCHEDULE

[illegible]

## SPLIT SYSTEM AIR CONDITIONING UNIT SCHEDULE

[illegible]

## FORCED AIR FURNACE SCHEDULE

FORCED AIR FURNACE SCHEDULE												
SYMBOL	MAKE & MODEL	SUPPLY FAN			VOLTAGE	HEATING CAPACITY (MBH)		COOLING COIL MAKE AND MODEL	AFUE	FILTERS	OPERATING WEIGHT (LBS)	REMARKS
		CFM	ESP (IN)	HP		INPUT	OUTPUT					
	CARRIER 56SMEB04012	1000	0.5	1/2	120/1/60	40	38	CARRIER CNPVP3617ACA	0.95	30% DISPOSABLE	250	COMPLETE WITH ALL ACCESSORIES AND CONTROLS. UPRIGHT POSITION AND DX - COOLING COIL.
	CARRIER 56SXTX07010016	1600	0.5	1/2	120/1/60	66	54	CARRIER CNPVP4817ACA	0.80	30% DISPOSABLE	250	COMPLETE WITH ALL ACCESSORIES AND CONTROLS. UPRIGHT POSITION, DX COOLING COIL, TWIN PACK KIT AND GREENHECK SERIES ES-10 BAROMETRIC DAMPER
	CARRIER 56SXTX07010016	1600	0.5	1/2	120/1/60	66	54	CARRIER CNPVP4817ACA	0.80	30% DISPOSABLE	250	COMPLETE WITH ALL ACCESSORIES AND CONTROLS. UPRIGHT POSITION, DX COOLING COIL, TWIN PACK KIT AND GREENHECK SERIES ES-10 BAROMETRIC DAMPER
	CARRIER 56SXTX07010012	1200	0.5	1/3	120/1/60	66	54	—	0.80	30% DISPOSABLE	120	4" FLUE DIAMETER, PROVIDE UPFLOW FURNACE WITH BOTTOM RETURN, COMPLETE WITH ALL ACCESSORIES (UPRIGHT POSITION)
	CARRIER 56SXTX07010012	1200	0.5	1/3	120/1/60	66	54	—	0.80	30% DISPOSABLE	120	4" FLUE DIAMETER, PROVIDE UPFLOW FURNACE WITH BOTTOM RETURN, COMPLETE WITH ALL ACCESSORIES (UPRIGHT POSITION)
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	CARRIER 56SXTX07010012	1200	0.5	1/3	120/1/60	66	54	—	0.80	30% DISPOSABLE	120	4" FLUE DIAMETER, PROVIDE UPFLOW FURNACE WITH BOTTOM RETURN, COMPLETE WITH ALL ACCESSORIES (UPRIGHT POSITION)

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## MECHANICAL REQUIREMENTS

1. FURNISH ALL LABOR, MATERIALS, EQUIPMENT, TRANSPORTATION, TESTING AND SERVICES NECESSARY FOR THE COMPLETE AND SATISFACTORY INSTALLATION OF THE WORK INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING ROUGH-IN AND FINAL CONNECTION TO ALL EQUIPMENT REQUIRING SERVICES.
  2. SCOPE OF WORK SHALL INCLUDE ALL CONDUITS, DISCONNECTS, LINE AND LOW VOLTAGE WIRING, AS SHOWN AND SPECIFIED PLUMBING SYSTEMS, ROOF EQUIPMENT PLATFORMS, CUTTINGS AND PATCHINGS, DEMOLITION AND HAULING OF EXISTING SYSTEMS AND EQUIPMENT
  3. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS IMPOSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. CAREFULLY INVESTIGATE THE CONDITIONS SURROUNDING THE INSTALLATION OF THIS WORK, FURNISH THE NECESSARY FITTINGS, ACCESSORIES AND DEVICES WHICH MAY BE REQUIRED TO COMPLETE THE INSTALLATION. VERIFY THAT ADEQUATE SPACE IS AVAILABLE TO INSTALL WORK AS SPECIFIED AND INDICATED, PRIOR TO DETAILING AND FABRICATION.
  4. THE GENERAL ARRANGEMENT INDICATED ON THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE. IN THE EVENT A FIELD CONDITION ARISES WHICH MAKES IT IMPOSSIBLE OR IMPRACTICAL TO INSTALL WORK AS SHOWN ON DRAWINGS, SUBMIT, IN WRITING THE PROPOSED "DEPARTURES" TO ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
  5. THE MECHANICAL EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE CITY OF TORRANCE BUILDING AND MECHANICAL CODES, AND REQUIREMENTS OF LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION.
  6. BEFORE BIDDING ON THIS WORK, CONTRACTORS SHALL MAKE A CAREFUL EXAMINATION OF THE PREMISES AND SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND REQUIREMENTS OF CONTRACT, BY THE ACT OF SUBMITTING A PROPOSAL FOR THE WORK INCLUDED IN THIS CONTRACT. THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH STUDY AND EXAMINATION, AND THAT HE/SHE IS FAMILIAR WITH AND ACCEPTS ALL CONDITIONS OF THE SITE.
  7. THE LOCATION OF APPARATUS AND EQUIPMENT INDICATED ON THE DRAWINGS ARE APPROXIMATE. DUCTS AND EQUIPMENT SHALL BE LOCATED AS NEARLY AS POSSIBLE TO THE INDICATED LOCATIONS.
  8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TORRANCE.
  9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TORRANCE.
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  18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TORRANCE.
  19. PERMANENT ACCESS TO EQUIPMENT SHALL BE PROVIDED. PROVIDE MINIMUM OF 42-INCHES CLEAR WORKING SPACE IN FRONT OF ACCESS PANELS TO COMPRESSORS, BLOWER ASSEMBLY AND AIR FILTER SECTIONS.
  20. EQUIPMENT SHALL BE SECURELY FASTENED TO BUILDING STRUCTURE AND THE VIBRATION ISOLATORS, AND EARTHQUAKE RESTRAINTS PER CODE.
  21. MINIMUM VENTILATION RATE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ASHRAE AND C.E.C TITLE-24 REQUIREMENTS
  22. WHERE NECESSARY IN DUCTWORK OR CASING, PROVIDE SUITABLE ACCESS DOORS AND FRAMES FOR INSPECTION, OPERATION AND MAINTENANCE OF ALL CONTROLS, MOTOR BEARINGS, OR OTHER APPARATUS CONCEALED BEHIND THE SHEET METAL WORK. ACCESS DOORS IN DUCTS MAY BE OF SINGLE OR DOUBLE PANEL CONSTRUCTION AS REQUIRED TO MATCH THE EXISTING DUCTWORK CONSTRUCTED OF NOT LESS THAN 18 GAUGE GALVANIZED STEEL AND SHALL HAVE SPONGE RUBBER GASKETS WITH HINGES AND LATCHES.
  23. ALL PLUMBING SYSTEM AND PIPING SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS
  24. REPLACE ALL EXISTING EQUIPMENT PLATFORM AND CURB CAPS
  25. WHERE APPLICABLE EXTEND PLUMBING VENT PIPE HORIZONTALLY ABOVE ROOF TO ALLOW 10 FEET DISTANCE BETWEEN VENT OUTLET AND ANY A/C UNIT FRESH AIR INTAKE
- ## ELECTRICAL AND CONTROL SYSTEMS
1. PROVIDE AND INSTALL NEW PROPERLY SIZED DISCONNECT SWITCH FOR ALL (HV) HEATING VENTILATING UNITS.
  2. REPLACE ALL EXISTING DISCONNECT SWITCHES FOR ALL REPLACED (AC) AIR CONDITIONING UNITS. DISCONNECT SWITCHES SHALL BE PROPERLY SIZED ACCORDING TO THE SCHEDULED UNITS'S MOTOR RATINGS.
  3. REPLACE ALL EXISTING THERMOSTATS SERVING PACKAGED AND SPLIT SYSTEM AIR CONDITIONING UNITS AND FORCED AIR FURNACES WITH VENSTAR MODEL T-2800

## ELECTRICAL AND CONTROL SYSTEMS

1. PROVIDE AND INSTALL NEW PROPERLY SIZED DISCONNECT SWITCH FOR ALL (HV) HEATING VENTILATING UNITS.
2. REPLACE ALL EXISTING DISCONNECT SWITCHES FOR ALL REPLACED (HV) AIR CONDITIONING UNITS. DISCONNECT SWITCHES SHALL BE PROPERLY SIZED ACCORDING TO THE SCHEDULED UNIT'S MOOP RATINGS.
3. REPLACE ALL EXISTING THERMOSTATS SERVING PACKAGED AND SPLIT SYSTEM AIR CONDITIONING UNITS AND TORQUED AIR HANDLERS WITH THERIAK MODEL 1-2800.

## MECHANICAL EQUIPMENT SCHEDULES

VARIOUS BUILDING'S AIR CONDITIONING UNIT  
REPLACEMENT  
**CITY OF TORRANCE**  
CITY OF TORRANCE, TORRANCE CALIFORNIA



**BARTEF YOOSEPHIANCE & ASSOCIATES, INC.**  
CONSULTING MECHANICAL ENGINEERS  
3734 GLENEAGLES DR.  
TARZANA, CA 91356  
(818) 345-8614, FAX. (818) 345-8615

[illegible]REMARKS

Date:	02/21/13
Drawn:	M.S.
Checked:	B.H.
Approved:	
Project No.	
Scale:	AS SHOWN

Drawing No.

M-2